L 10686-67

ACC NR: AP6029673

10

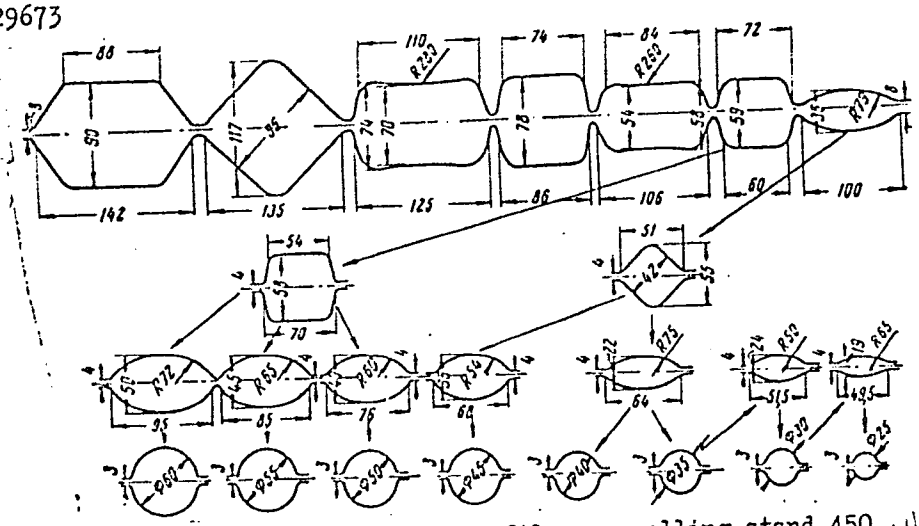
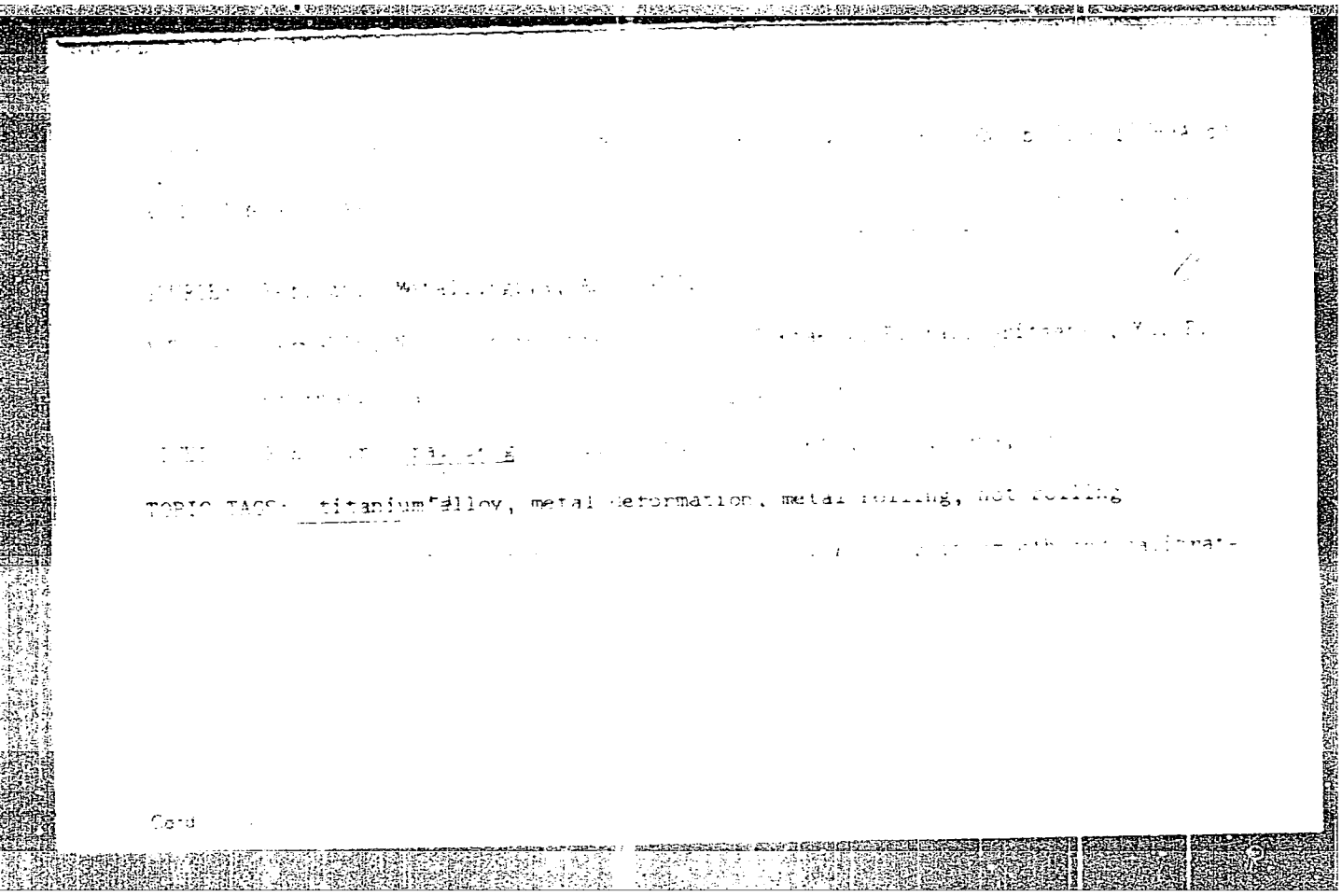


Fig. 1. Schematic for rolling large round profiles on rolling stand 450

the above equation. The degree of mold filling for hexagonal, square, and oval specimens was calculated after I. Ya. Tarnovskiy (Formoizmeneniye pri plasticheskoy obrabotke metallov, Metallurgizdat, 1953). The results are tabulated. It is concluded that rolling of large diameter stock made of titanium alloys VT1-1, VT3-1, OT4, VT5, VT5-1, VT6, VT8, VT15, VT14, and others yields products with satisfactory mechanical properties. Orig. art. has: 1 table, 3 graphs, and 4 equations.

Card 2/2 SUB CODE: 13/ SUBM DATE: none/ ORIG REF: 006/ OTH REF: 001



TOPIC TAGS: titanium alloy, metal deformation, metal rolling, hot rolling

Card

KRASNIKOV, N.Ye.; SKRYABIN, N.P.; KUSHAKEVICH, S.A.; NIKITIN, Ye.M.; BAZHENOV, Yu.M.; TOKMAKOV, P.Ya.; GRITSENKO, Yu.P.; MAKHMUTOVA, Ye.A.

Investigating the mechanical properties and the structure of titanium alloys during rolling. TSvet. met. 38 no.8:84-85 Ag '65. (MIRA 18:9)

L 63193-65 EWP(k)/EWP(z)/EWA(c)/EWT(d)/EWT(m)/EWP(b)/T/EWA(d)/EWP(l)/EWP(w)/EWP(v)/
ACCESSION NR: AP5019973 EWP(t) MJW/JD/HW UR/0136/65/000/008/0084/0085
669.295.004.12:621.771.2

AUTHOR: Krasnikov, N. Ye.; Skryabin, N. P.; Kushakevich, S. A.; Nikitin, Ye. M.; Bazhenov, Yu. M.; Tokmakov, P. Ya.; Gritsenko, Yu. P.; Makhmutova, Ye. A.

TITLE: Investigation of the mechanical properties and structure of titanium alloys during rolling

SOURCE: Tsvetnyye metally, no. 8, 1965, 84-85

TOPIC TAGS: titanium alloy, titanium alloy rolling, titanium alloy structure, titanium alloy mechanical property

ABSTRACT: The mechanical properties and microstructure of BT5, BT8, and BT15 titanium alloys rolled on rolling mill 300 at various temperatures and with various reductions have been investigated. Specimens 20 x 28 x 140 mm were preheated and rolled with a rolling-end temperature of 800, 850, 900, 1000, and 1100C. The experiments showed that tensile strength of all the alloys increased as rolling temperature decreased from 1100 to 800C. Microscopic examination revealed that recrystallization was not completed at 800—850C, but only at 900—1000C. The recrystallized structure improved ductility; the values changed according to the curve, hav-

Card 1/2

L 63498-65
ACCESSION NR: AP5019973

ing a maximum at 900—1000C. A further increase in rolling temperature up to 1100C increased the grain size and concentration of impurities on the grain boundaries. As a result, the elongation and reduction of area dropped and the embrittlement increased. A change of rolling reduction from 10 to 27% affected the tensile strength insignificantly, but increased plastic characteristics considerably. This phenomenon is caused by improved structure. Orig. art. has: 3 figures and 2 tables. [WW]

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: MM,IS

NO REF SOV: 000 OTHER: 000 ATD PRESS: 4023

Card 2/2

TOKMAKOV, P.Ya.; KRICHALOV, K.F.

Split rod for wiping internal pipe surfaces. Biul. TSIICHM no.10: 45 '60. (MIRA 15:4)

(Pipe mills--Equipment and supplies)

TOKMAKOV, S.

Future is born today. Sov. torg. 35 no.3:44-45 Mr '62.
(MIRA 15:3)

1. Zamestitel' predsedatelya ispolnitel'nogo komiteta oblastnogo Soveta deputatov trudyashchikhsya g. Lugansk.
(Lugansk--Retail trade)

TOKMAKOV, U.

"Control o f the operation of a transmitter."

So. Radio, Vol. 7, p. 39, 1952

NIKIFOROV, I.; MAKAROV, A.; SMOLYAKOV, N.; SIPER, E.; MOGILA, V.; LARIN, M.; FILIPPOV, K.; TOKMAKOV, V.; BARANOVSKIY, V.; CHETVERIKOV, K.; POZNANSKIY, A.; SHUTOV, M.; ROZENFEL'D, L.; RUD', A.

Mechanization of waterproofing operations. Stroitel' 8 no.11: 15-20 N '62. (MIRA 16:1)
(Waterproofing--Equipment and supplies)

ACCESSION NR: AP4030339 S/0049/64/000/003/0370/0373

AUTHORS: Maksimov, L. S.; Tokmakov, V. A.

TITLE: Use of a modified SPM-16 seismic detector for recording displacements of oscillatory movements

SOURCE: AN SSSR. Izv. Ser. geofiz., no. 3, 1964, 370-373

TOPIC TAGS: seismic detector, SPM-16, oscillation, oscillatory movement, frequency range, overdamping, vibrograph, equilibrium position, stabilizer, natural frequency, oscillograph, magnification

ABSTRACT: The authors undertook this work because of the need to study dynamic processes in the frequency range 10-100 c p s. The desired modification was obtained by 1) lowering the natural frequency of the oscillator receiver (the SPM-16 seismic detector) from 34 to 10 cps or lower, 2) selecting a galvanometer that operates in an overdamped state, which fulfills the function of integrating cells in the given frequency range, and 3) computing the resistance of the frequency correction that brings about optimal damping of the receiver and possibly greater damping of the galvanometer at a rather high magnification of the vibrograph (on the order of 1000) and a minimal coupling factor. The authors conclude that the

Card 1/2

ACCESSION NR: AP4030339

resulting vibrograph has the following desirable qualities: 1) limiting frequency and no complicating measurements of power supply for pickup, magnifier, stabilizer, or other elements; 2) rather high magnification, on the order of 1000 in the operating frequency range (12-200 c p s); 3) stability of the equilibrium position of the suspended pickup system, which excludes the necessity of any arrangement for stopping or regulating the position of equilibrium; and 4) the basic components (seismic detector, oscillograph) are manufactured by industrial organizations, and this makes the instrument relatively inexpensive while allowing a certain uniformity in type of detector and galvanometer. The authors note in conclusion that other seismic detectors (such as the SPED-56) may be used in the vibrograph, if the natural frequency is reduced; or special low-frequency detectors may be used (the NS-III or NS-IVm). Orig. art. has: 4 figures and 12 formulas.

ASSOCIATION: Nauchno-issledovatel'skiy sektor "Gidroproyekta" (Scientific Research Sector of "Gidroproyekt")

SUBMITTED: 15Apr63 DATE ACQ: 29Apr64 ENCL: 00

SUB CODE: AS NO REF SOV: 004 OTHER: 000

Card 2/2

TOKMAKOV, V.A.; UCHITEL', Yu.Ya.

Calculation of the amplification in a K-001 vibrometric set and experimental testing of the calculation. Trudy Inst. fiz. Zem. no.35:95-102 '64. (MIRA 17:12)

MAKSIMOV, L.S.; TOKMAKOV, V.A.

Remote control of a long-period vibration pickup. Trudy Inst. fiz. Zem. no.19:86-90 '61. (MIRA 15:3)
(Seismometers) (Hydraulic structures--Vibration) (Remote control)

TOKMAKOV, V.A.

Design of cylindrical magnetic systems with permanent magnets.
Trudy Inst. fiz. Zem. no.26:52-61 '63. (MIRA 16:11)

MAKSIMOV, L.S.; TOKMAKOV, V.A.

Use of a modified SPM-16 seismic detector for recording shifts of vibratory motion. Izv. AN SSSR. Ser. geofiz. no.3: 370-373 Mr '64. (MIRA 17:3)

1. Nauchno-issledovatel'skiy sektor Vsesoyuznogo ordena Lenina proyektno-izyskatel'skogo i nauchno-issledovatel'skogo instituta im. Z.Ya. Zhuka.

S/619/61/000/019/014/019
D039/D112

AUTHORS: Maksimov, L.S.; Tokmakov, V.A.

TITLE: Remote regulation of a long-period vibration pickup

SOURCE: Akademiya nauk SSSR. Institut fiziki Zemli. Trudy, no. 19 (186) Moscow, 1961, Seysmicheskiye pribory, 86-90

TEXT: The authors describe a remote regulator of the zero position of the pendulum of a vibration pickup used in oscillographic recording of vibrations of 1 cps and above in hydraulic-engineering structures and hydroelectric generating sets. It was developed at the Nauchno-issledovatel'skiy sektor Gidroproyekta (Scientific Research Division of the Gidroproyekt) for the purpose of ensuring faultless operation of vibration pickups installed in spillway dams and remaining inaccessible for months or even years. The regulator consists of an actuating mechanism, a signalling pickup of the pendulum position and a control panel. It operates by screwing up one of the micrometer screws of the vibration pickup by means of any remotely controlled device, upon a change in the equilibrium position of the pendulum. The

Card 1/3

Remote regulation ...

regulator was made for the ВДЦ-2 (VDTs-2) long-period vibration pickup designed by the Vsesoyuznyy nauchno-issledovatel'skiy institut elektro-energetiki (All-Union Scientific Research Institute of Power Engineering), the VDTs-2 so equipped, being designated the ВДЦ-2Н (VDTs-2N). The technical data of the VDTs-2N vibrograph are as follows: pendulum weight - 150g; vibration pickup weight - 3 kg; natural oscillations period of the pendulum - 1.2 sec; coil resistance - 200 ohms; natural oscillation frequency of the galvanometer - 20 cps; resistance of the galvanometer - 36 ohms; external critical resistance of the galvanometer - 1,000 ohms; operational range of the vibrograph in respect to amplitude 0 - 1,000 μ ; operational range of the vibrograph in respect to frequency 1 - 100 cps; minimum magnification - 350; dimensions of the pickup - 15 x 11 x 10 cm. The pickup's sensitivity can be varied by 2.5, 10, 20 and 50 times by means of shunts. A special shunt serves for producing the necessary damping of the pendulum. The ОТ -24-51 (OT-24-51) oscillograph equipped with highly sensitive low-frequency galvanometers having a high external critical resistance, was used in the vibration recording. In October 1958, four VDTs-2N vibration pickups equipped with remote regulators were installed in the Stalingradskaya vodoslivnaya plotina

Card 2/3

(Stalingrad Spillway Dam), and in October 1959, another 6 pickups of this type were installed in the spillway dam of the Volzhskaya GES im. V.I. Lenina(Volzhskaya Hydroelectric Power Plant im. V.I. Lenin). It was found that the remote regulator is reliable in operation, comparatively simple to use and can be recommended for long-period vibration pickups installed in places inaccessible for a long period of time. The authors of the article and engineers V.V. Kalinin and S.N. Godatelev participated in the development of the regulator. It is also mentioned that the ВЭГИК(VEGIK), ВДЦ -1 (VDTs-1) and И -001 (I-001) vibration pickups are also used for recording vibrations of 1 cps and above in hydrotechnical structures. The latter is being serially produced at the Kishinevskiy zavod elektroizmeritel' nykh priborov (Kishinev Electrical Measuring Instruments Plant). There are 3 figures and 2 Soviet-bloc references.

L 5185-66 EWT(l)/EWA(h) GW
ACC NR: AT6000090 SOURCE CODE: UR/2619/64/000/035/0095/0102

AUTHOR: Tokmakov, V. A.; Uchitel', Yu. Ya. 49 B+1

ORG: Institute of Physics of the Earth im. O.Yu. Shmidt, AN SSSR (Institut fiziki zemli AN SSSR)

TITLE: Calculation of the magnification of the K-001 vibration meter and an experimental computation check

SOURCE: AN SSSR. Institut fiziki zemli. Trudy, no. 35, 1964, 95-102

TOPIC TAGS: vibration measurement, seismologic instrument, seismography, galvanometer

ABSTRACT: Difficulties encountered in experimentally calibrating the K-001 vibration meter are described. Magnification calculations and methods used at the Institute of Physics of the Earth to perform this task are discussed (photograph of K-001, schematics for electrical circuit, and determination of natural frequency of M-002 galvanometers are given). Orig. art. has: 18 formulas, 4 figures, 1 table. [FSB: v. 1, no 5]

SUB CODE: ES / SUBM DATE: none / ORIG REF: 007

Card 1/1

09010468

TOKMAKOV, V.A.; KHARIN, D.A.

Modification of the SPM-16 seismograph for use in recording accelerations during low frequency vibrations. Trudy Inst.fiz.zem. no.5:126-130 '59. (MIRA 13:6)
(Seismometers)

L 45616-66
ACC NR: AP6033983 SOURCE CODE: UR/0020/66/168/005/1132/1134

AUTHOR: Koridalin, Ye. A.; Medvedev, S. V.; Rustanovich, D. N.; Tokmakov, V. A.; Khadzhiyevskiy, D.

ORG: Institute of Physics of the Earth, im. O. Yu. Shmidt, AN SSSR (Institut fiziki Zemli AN SSSR); Skoplje University Seismic Station, Skoplje

TITLE: Seismic conditions around Skoplje after the earthquake of 26 July 1963 on the basis of instrumental observations

SOURCE: AN SSSR. Doklady, v. 168, no. 5, 1966, 1132-1134

TOPIC TAGS: earthquake, tectonics, seismology/Skoplje

ABSTRACT: In 1964-1965 Soviet and Yugoslav seismologists carried out instrumental seismic investigations in the neighborhood of Skoplje, in Yugoslavia, site of a disastrous earthquake on 26 July 1963. VEGIK Soviet seismic stations with a magnification of 20,000 were used at five stations surrounding the epicentral zone and it was possible to determine epicenters and focal depths with high accuracy. During the year about 200 epicenters were determined (a map accompanies the text); the energy class of the recorded earthquakes was in the range $4 \leq K \leq 10$ ($K = \log E$ (E in J)). It was determined that the weak recorded earthquakes are the aftershocks of the main earthquake. Seismic activity still is high but will continue to abate. The main earth-

Card 1/2 UDC: 550.34

L 45616-66

ACC NR: AP6033983

quake was in a region of very strong tectonic movements. In general, it was possible to determine the full seismic picture at Skoplje, but there are no data which could be used for predicting the possibility or time of a recurrence. This paper was presented by Academician V. V. Shuleykin on 7 January 1966. Orig. art. has: 2 figures. [JPRS]

SUB CODE: 08 / SUBM DATE: 27Dec65 / ORIG REF: 001 / SOV REF: 006

Card 2/2 mjs

TOKMAKOV, V. S., TATOCHENKO, L. K. and MEDVEDEV, S. V.

"Application of radio active iridium for gamma defect detection", appearing in the "Detection of Derects in Metals by Gamma — Collection of Papers", (Gamma Defektoskopiya Metallov — Sbornik Statei), published by the Academy of Sciences USSR, p 94, 1955.

L 23811-66 EA...../EWP(j)/T/EPC(m)-0 WW/RM

ACC NR: AR6005209 SOURCE CODE: UR/0058/65/000/009/E008/E008

SOURCE: Ref. zh. Fizika, Abs. 9E72

AUTHORS: Tokmakov, V. I.

TITLE: Sound pressure of the noise of boiling binary mixtures

REF SOURCE: Uch. zap. Kabardino-Balkarsk. un-t. Ser. fiz.-matem., vyp. 22, 1964, 273-274

TOPIC TAGS: acoustic spectrum, acoustic noise, boiling, pressure effect

TRANSLATION: The author studied the sound pressure (SP) and the spectral characteristics of the noise of mixtures of ethanol and water, methanol-1, glycerine-1, and acetone-1 during boiling on a thin wire heated with current. The SP and the amplitude of the spectral components of the noise depend on the concentration of the components. For pure components they are smaller than for mixtures, other conditions being equal. The height of the maximum of SP increases with decreasing diameter of the wire at constant current. V. Skripov.

SUB CODE: 20

Card 1/1

Токмаков, В.С.

32-8-34/61

AUTHORS: Tatochenko, L.K., Lyndin, V.V., Tokmakov, V.S., Moysh, Yu.V., Sabinin, P.G., Shchebrov, M.N.

TITLE: An Automatic Magnetic Defectoscope for Controlling Bar Materials.
(Avtomatizirovannyy magnitnyy defektoskop dlya kontrolya prutkovykh materialov.)

PERIODICAL: Zavodskaya Laboratoriya, 1957, Vol. 23, Nr 8, pp. 967-969 (USSR)

ABSTRACT: For controlling bar-like and cylindrical objects of production, where the defects are mostly to be sought in the direction of the axis, magnetization by a magnetic circulation field is used which is effected by the passage of current along the bar to be investigated. The amperage is chosen according to the cross section of the bar to be investigated, namely according to the formula: $I = (10 \pm 20)\ d$, where I signifies the amperage and d the cross section of the object. The so-called defectoscope was constructed on the basis which is described here. This apparatus, however, only permits to make random tests. An automatic

CARD 1/2

An Automatic Magnetic Defectoscope for Controlling Bar Materials.

control was experimentally worked out by the Ural branch of the Academy of Sciences of the USSR for the Plant imeni Serov. In this construction the object (bar) was immersed into a tub with magnetic suspension and at the same time current was sent through it. The method proved to be somewhat more practical, but the secondary functions made the control cumbersome. The paper further describes a new device which permits further automatization of the above-mentioned functions. On the slant plane the rolling bars are one by one automatically clamped, then they are in a circular movement immersed to the tub (as above with the passage of current) and finally they are let out of the clamps on the other side of the slant plane where they again begin rolling. This automatic operation takes 7 seconds per bar. Such an apparatus is already used in the Elektrostal' Works.
(3 illustrations, 3 references)

ASSOCIATION: Central Scientific Research Institute for Ferrous Metallurgy. (Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii)

AVAILABLE: Library of Congress.

AUTHOR: Tokmakov, V. S. SOV/32-24-8-24/43

TITLE: The Use of Gamma Rays From Radioactive Thulium in the Detection of Defects in Metals (Primeneniye radioaktivnogo tuliya dlya gamma-defektoskopii)

PERIODICAL: Zavodskaya Laboratoriya, 1958, Vol. 24, Nr 8, pp. 983-985(USSR)

ABSTRACT: The γ radiation of Co^{60} isotopes is used to a large extent in the metal industry to control quality, and especially in welding. In the factories of the Kuznetskiy metallurgicheskiy kombinat (Kuznetsk Metallurgical Combine) and the Khartsyzskiy trubnyy zavod (Khartsyzsk Pipe Factory) radioactive Ir^{192} was used which has softer γ radiation than Co^{60}. Since the cobalt determination is relatively less sensitive in steel with a thickness under 10 mm, the studies reported here were concerned with the possible application of Tu^{170}. The results obtained are given along with the method by which the defects were determined. To determine the sensitivity of the method two objects with indentations of various depths were employed. The penetration radiation was recorded

on a film of the "roentgen KK" type using a focusing distance of 150 mm. A photograph is given of the radiation penetration through a weld seam which had a thickness of 2 mm. The use of Ir^{192} γ radiation was compared to that of Tu^{170}, and it was found that it is possible to detect smaller defects with Tu^{170}. By use of Tu^{170} weld seams and steel products with thicknesses of 0,5-10 mm can be controlled. There are 5 figures, 1 table, and 2 references, 1 of which is Soviet.

ASSOCIATION: Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii (Central Scientific Institute for Ferrous Metallurgy)

Card 2/2

TOKMAK v U.S.

Ed. of Publishing House: F.M. Belyanin; Tech. Ed.: T.P. Polenova.

PURPOSE: This book is intended for specialists in the field of atomic energy, and Academiya nauk SSSR.

Editorial Board of Set: V.I. Dikunin, Academician (Resp. Ed.); F.K. Shmuilovskiy (Deputy Resp. Ed.); Yu. S. Zaslavskiy (Deputy Resp. Ed.); L.K. Tatochenko, Ed. Ye. Verkhovskiy, S.T. Kuzmov, L.N. Petrova and N.G. Zelvinskaya (Secretary).

COVERAGE: This collection of papers covers a very wide field of the utilization of tracer methods in industrial research and control techniques. The topic of this volume is the use of radioisotopes in the machine- and instrument-manufacturing industry. The individual papers discuss the applications of radioisotope techniques in the study of metals and alloys, problems of friction and lubrication, metal cutting, engine performance, and defects in metals. Several papers are devoted to the use of radioisotopes in the automation of industrial processes, recording and measuring devices, quality control, flowmeters, level gages, safety devices, radiation counters, etc. These papers represent contributions of various Soviet institutes and laboratories. They were published as transactions of the All-Union Conference on the Use of Radioactive and Stable Isotopes and Radiation in the National Economy and Science, April 4-12, 1957. No personalities are mentioned. References are given at the end of most of the papers.

Tokmakov, V.S.

18(0) PHASE I BOOK EXPLOITATION SOV/2125

Tsentral'ny nauchno-issledovatel'skiy institut chernoy metallurgii.
Institut Metallovedeniya i fiziki metallov

Problemy metallovedeniya i fiziki metallov (Problems in Physical Metallurgy and Metallophysics) Moscow, Metallurgizdat, 1959. 545 p. (Series: Its: Sbornik trudov, 6) Errata slip inserted. 3,600 copies printed.

Additional Sponsoring Agency: USSR. Gosudarstvennaya planova komissiya.

Ed. of Publishing House: Ye.M. Berlin; Tech. Ed.: P.G. Islent'yeva;
Editorial Board: D.S. Kamenetskaya, B.Ya. Lyubov (Resp. Ed.),
Ye.F. Spektor, L.M. Utevskiy, L.A. Shvartsman, and V.I. Malkin.

PURPOSE: This book is intended for metallurgists, metallurgical engineers, and specialists in the physics of metals.

COVERAGE: The papers in this collection present the results of investigations conducted between 1954 and 1956. Subjects

Card 1/18

covered include crystallization of metals, physical methods of influencing the processes of crystallization, problems in the physical chemistry of metallurgical processes, development of new methods and equipment for investigating metals, and production control. References follow each article.

TABLE OF CONTENTS:

AVAILABLE: Library of Congress

Card 18/18

00/jar
9-1-59

25(6) SOV/32-25-7-47/50

AUTHOR: Tokmakov, V. S., Director of the Laboratory of the TsNIICHERMET

TITLE: V. S. Sokolov, Materiology of Materials, Gosenergoizdat, 1957, 240 Pages, 7000 Copies, Price 15 Rubles 75 Kopecs (V. S. Sokolov-Defektoskopiya materialov Gosenergoizdat, 1957, 240 str., tirazh 7000, tsena 15 r. 75 k.) I

PERIODICAL: Zavodskaya laboratoriya, 1959, Vol 25, Nr 7, pp 893-894 (USSR)

ABSTRACT: The reviewed book is a practical compendium on the use of physical investigation methods for quality control without destruction of the object to be investigated. As compared with other books of this kind it has the advantage of giving a general survey of the methods mentioned above; it does not deal with individual methods only. It consists of four parts; each part explains one materiological method. The first part deals with the physical foundations of magnetic materiology, the types of magnetization of the objects to be controlled, and the electrical schemes of the magnetic devices; several examples of the practical application of the latter are given. This part is somewhat unsatisfactory because several of the respective problems are insufficiently discussed or not discussed at all. The second

Card 1/2

SOV/32-25-7-47/50

V. S. Sokolov, Materiology of Materials, Gosenergoizdat, 1957, 240 Pages, 7000 Copies, Price 15 Rubles 75 Kopecs. I

part deals with the luminiscence method of material testing; there are also some dates missing. The third part of the book is devoted to ultrasonic materiological control; there is only the depth gage UZD-7N mentioned for the depth determination of the material defect and no data given on the electronic depth gage. In this part the immersion device LETI is mentioned, the immersion method is, however, insufficiently explained. The fourth part of the book deals with the methods of X-ray and gamma-materiological control. There are also several shortcomings. It is pointed out that despite its shortcomings the book is still of practical value.

ASSOCIATION: Laboratoriya TsNIIChERMET (Laboratory TsNIIChERMET)

Card 2/2

SOV/32-25-7-27/50

28(5)

AUTHOR: Tokmakov, V. S.

TITLE: Application of Gamma- and X-Rays for Quality Control in Metallurgical Industry (Ispol'zovaniye gamma - i rentgenovskogo izlucheniya dlya kontrolya kachestva metallurgicheskoy produktsii)

PERIODICAL: Zavodskaya laboratoriya, 1959, Vol 25, Nr 7, pp 857-862 (USSR)

ABSTRACT: Since the accuracy of quality control by means of gamma- and X-rays depends mainly on the radiation energy and the thickness of the metal to be tested, isotopes with varying energy of gamma-rays have to be used (Table) in which connection also half-life and specific activity have to be taken into consideration (Ref 1). For the mass control of simply shaped standardized articles usually the ionization method of gamma defect-determination is used which records the radiation by scintillation counters. The ionization apparatus ID-3 for determining defects which was worked out by the TsNIIChM (see Association) and has been destined for the control of weld seams of oil and gas pipes (diameter: 560-720 mm) belongs to this type of device. A scheme and description of the device ID-3

Card 1/3

are given (Fig 3), as well as of the indicator of radiation intensity (Fig 4), the radiation source, and the amplifyer (Fig 5). Ir^{192} is used as radiation source and the indicator of radiation intensity is provided with a photoelectron amplifyer FEU-19. An apparatus was tested at the Khartsyzkiy trubnyy zavod (Khartsyzsk Tube Factory) which provides for an automatic development and fixation of photographic paper coming out of the oscillograph. By using electron-optic transformers (EOT) (transformation of X-rays into optic ones and vice versa) more precise investigations can be carried out than by using luminiscent roentgenoscopic screens (Fig 9. Scheme of an apparatus of the first type). The experiments carried out at the TsNIIChM and the X-ray Radiological Institute showed that steel articles up to a thickness of 10 mm can be tested by the X-ray unit RUM-4 (with X-ray tubes 3 BDM-100 and (EOT) by Philips) and that precise determinations can be carried out by using the microscope BM-56. The reproductions by roentgenoscopic screens were compared with those by X-ray films (R-Kh) in order to find out the sensitivity of the testing methods and it was found that the visual method (by using the (EOT))is twice as sensitive as that of the roentgenoscopic screen. There are

SOV/32-25-7-27/50

Application of Gamma- and X-Rays for Quality Control in Metallurgical Industry

10 figures, 1 table, and 6 references, 4 of which are Soviet.

ASSOCIATION: Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii (Central Scientific Research Institute of Ferrous Metallurgy)

Card 3/3

18(5,7) SOV/135-59-8-11/24

AUTHORS: Tokmakov, V.S., Engineer and Shamayeva, G.G., Candidate of Technical Sciences

TITLE: The Use of Visual X-Ray Control in Welding Joints

PERIODICAL: Svarochnoye proizvodstvo, 1959, Nr 8, pp 35-36 (USSR)

ABSTRACT: The quality of welded joints is at the present time generally controlled with the photographic methods of X-ray and gamma-ray control by watching the photo of the welded seam in the X-ray film. Since this method is using up a lot of photographic materials, and since a long time is necessary to develop the film, the method can be applied only in spot checks. For a mass control of welded joints it would be desirable to replace the photographic method by a visual one in which the picture of the work piece appears on a fluorescent screen. The use of such screens in X-raying steel of a thickness up to 10 mm only permitted to detect flaws whose depth is larger than 8% of the total strength of the steel. The low sensibility of the visual method using X-ray screens finds its explanation in the fact

Card 1/3

that they have a low illumination power. An increase in the luminosity of the screens may be achieved by considerably enlarging the capacity of the radiation, but this would complicate the Roentgen apparatus and increase the dangerousness of the work. The use of a television set in the X-raying process made the visual method completely undangerous, but the sensibility and depth of transillumination remained the same. The clearness of the picture can be improved considerably by using an electronic-optical transformer, which transforms the X-ray picture first into a light-optical one, then into an electronical one, and then back into a light-optical picture. The principle of the X-ray method with an electronic-optical transformer is shown in figure 1. The improvement in the clearness of the picture in the electronic-optical transformer in comparison to the clearness of the X-ray screen is achieved by enlarging the luminous flux from the initial screen and by the electronic-optical scaling down of the picture. The great improvement of

The Use of Visual X-Ray Control in Welding Joints

the picture caused by the transformer makes it possible to control the metal with X-ray installations of low capacity. Welding-seams of a thickness up to 10 mm were tested with a Roentgen set of type RUM-4 and a X-ray tube of type ZBDM-100 which is installed 800 mm from the welding seam. The electronic-optical transformer which was used was a product of the Philips company. In conclusion the author compares the sensibility of the visual and photographic methods. There are 3 graphs and 1 diagram.

ASSOCIATION: TsNIIChM (Tokmakov); GNIRRI (Shamayeva)

TOKMAKOV, V.S.

Using gamma-ray defectoscopy in metallurgy. Probl.metalloved.i fiz.met. no.6:537-540 '59. (MIRA 12:8)
(Metals--Defects) (Gamma rays--Industrial applications)

TATOCHENKO, L.K.; MOYSH, Yu.V.; LYNDIN, V.V.; TOKMAKOV, V.S.

Magnetic power inspection method in metallurgy. Probl.metalloved.i fiz.met. no.6:460-465 '59. (MIRA 12:8)
(Metals--Defects) (Magnetic testing)

TOKMAKOV, V.S.

Using gamma and X rays for quality control in metallurgical production. Zav.lab. 25 no.7:857-862 '59. (MIRA 12:10)

1. TSentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii.
(Radiation) (Metallurgy)

TOKMAKOV, V.S.; YERMOLOV, I.N.

"Flaw detection" by V.S.Sokolov. Reviewed by V.S.Tokmakov, I.N.Ermolov. Zav.lab. 25 no.7:893-895 '59. (MIRA 12:10)

1. Rukovoditel' laboratorii TSentral'nogo nauchno-issledovatel'skogo instituta chernoy metallurgii (for Tokmakov). 2. Rukoviditel'-gruppy ul'trazvukovoy defektoskopii TSentral'nogo nauchno-issledovatel'skogo instituta tekhnologii i mashinostroyeniya (for Yermolov).

(Materials--Testing)
(Sokolov, V.S.)

S/137/62/000/003/142/191
A052/A101

AUTHOR: Tokmakov, V. S.

TITLE: Application of gamma-ray flaw detection in metallurgy

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 3, 1962, 69, abstract 3I450 ("Sb. tr. In-t metalloved. i fiz. metallov Tsentr. n.-i. inta chernoy metallurgii," no. 6, 1959, 537-540)

TEXT: The advantages of the gamma-ray flaw detection compared with the roentgenoscopy for the inspection of large-size products are analyzed. The data on application of the gamma-ray flaw detection at home plants to the inspection of castings and welded structures are cited. The experience made at the "Elektrostal'" plant in application of the gamma-ray flaw detection to the inspection of high-alloy steel ingots 250 - 300 mm thick has shown, that the method of the gamma-ray flaw detection makes possible a good determination of shrinkage hole boundaries but fails to detect small defects essential at the further processing of the ingots. The application of the gamma-ray flaw detection at the Kuznetsk Metallurgical Combine made it possible to realize the technological control of castings, welded assemblies of blast furnaces, pipe-

Card 1/2

lines, ladles and others. At the Dneprovsk Lokomotive Repair Plant the gamma-ray flaw detection is used for inspection of welded seams of stokers, tanks and high-pressure pipe-lines. The data on the application of the gamma-ray flaw detection at "Azovstal'", "Zaporozhstal'", Voronezh and Debal'tsevo plants to inspection of cast blanks for gears, shafts and other machine elements are cited. Various types of containers and equipment for the gamma-ray inspection are described and recommended.

N. Geveling

[Abstracter's note: Complete translation]

S/137/62/000/004/131/201
A060/A101

AUTHORS: Tatochenko, L. K., Moysh, Yu. V., Lyndin, V. V., Tokmakov, V. S.

TITLE: Magnetic dust method of control in metallurgy

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 4, 1962, 87, abstract 4I524 ("Sb. tr. In-t metalloved. i fiz. metallov Tsentr. n.-i. in-ta chernoy metallurgii", 1959, 6, 460-465)

TEXT: A use is proposed for rod-shaped ferromagnetic material for the magnetic dust method of control. The overall view and the electrical diagram of a magnetic defectoscope are given, which make it possible to carry out the semiautomatic control of steel rods with 5 - 22 mm diameter and length 1,500 - 4,000 mm. The main units of the flaw detector are: the receiving and control stand, the vat filled with a magnetic emulsion, and the main shaft with clamps for the rods, whose rotation is realized by an asynchronous motor with power 1.7 kw, 1,000 rpm, through a worm-gear reducer, a cam gear, a geared sector, and a cog-wheel torque-limiting clutch. The switching on and off of current passed through the rod while the latter passes through the vat (in the course of ~3sec) is carried out automatically by means of a terminal switch. The current up to

Card 1/2

Magnetic dust method of control in metallurgy

S/137/62/000/004/131/201
A060/A101

1,000 amps at a rod potential up to 12 volts is regulated by the connection of a varying number of sections of the primary winding of the transformer to the power grid. There are 7 references.

A. Romanov

[Abstracter's note: Complete translation]

Card 2/2

TOKMAKOV, V.S.

"Investigation of materials by means of X and gamma rays" by V. Gaidovskii. Reviewed by V.S. Tokmakov. Zav.lab. 26 no.7:910-911 '60. (MIRA 13:7)
(Materials--Testing) (X rays--Industrial applications) (Gamma rays)

85527

S/032/60/026/011/012/035
B015/B066

1.9600 also 2209

AUTHORS: Tokmakov, V. S. and Smirnov, V. N.

TITLE: Increase of Sensitivity of the Immersion Method in Ultrasonic Quality Control

PERIODICAL: Zavodskaya laboratoriya, 1960, Vol. 26, No. 11, pp. 1238-1239

TEXT: By applying the immersion method in the ultrasonic quality control a special preparation of the parts is avoided, but the energy is 13 times lower than with the contact method. This disadvantage may be compensated to a certain degree by the fact that the energy of the ultrasonic vibrations of the emitted ray is increased. In the present case an attachment was developed for this purpose which includes a synchronizing pulse amplifier, ultrasonic generator, and a protective circuit for the connection of the B4-7M (V4-7I) receiver. The amplifier of the trigger pulses has a 6N8 (6N8) tube and pulse transformer. The pulse generator has a shock excitation with a TGM1 35/3 (TGII 35/3) thyratron. The total

Card 1/3

Increase of Sensitivity of the Immersion Method in Ultrasonic Quality Control

S/032/60/026/011/012/035
B015/B066

capacity of the circuit is 190 micro-microfarads and the frequency 2.5 Mc/sec. By a change of the inductivity of the coils in the generator circuit different frequencies can be adjusted. The protective circuit for the receiver of the generator signals has a 6X6 (6Kh6) double diode, when working with a radiation head, which bounds the strong pulse emitted on either side. The weak pulse reflected from the flaw is, however, amplified by means of the 6П13С (6P13S) tube and then reaches the receiver. To avoid a break-down of the radiation head, when applying pulses of higher amplitude, the samples were tested in distilled water (a note of the editor says that transformer oil would be more suitable). To estimate the accuracy of the immersion method with the V4-7I ultrasonic device, with and without the attachment described for the amplification of the reflected pulse, flaws 20 mm deep which represented openings of different diameters, were tested. It was found that by means of the attachment a quality control is possible for sheets and hot-rolled products without special surface preparation. There are 2 figures and 1 Soviet reference.

Card 2/3

85527

Increase of Sensitivity of the Immersion Method in Ultrasonic Quality Control

S/032/60/026/011/012/035
B015/B066

ASSOCIATION: Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii im. I. P. Bardina (Central Scientific Research Institute of Ferrous Metallurgy imeni I. P. Bardin)

X

Card 3/3

TOKMAKOV, V.S ; SMIRNOV, V.N.

Increasing the sensitivity of the immersion method of ultrasonic control. Zav.lab. 26 no.11:1238-1239 '60. (MIRA 13:11)

1. TSentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii im. I.P.Bardina.
(Metals--Testing) (Ultrasonic testing)

TOKMAKOV, V.S.

Costs of gammagraphy as determined by the use of various radioisotopes. Zav.lab. 26 no.11:1322-1323 '60. (MIRA 13:11)

1. TSentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii im. I.P.Bardina.
(Gamma rays--Costs) (Radioisotopes)

TOKMAKOV, V.S.

Effect of photographic processing on the contrast and density of a negative in X-ray and gamma-ray flaw detection. Zav. lab. 27 no. 4:479-480 '61. (MIRA 14:4)

1. TSentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii imeni I.P. Bardina.
(X rays--Industrial applications) (Gamma rays)

TOKMAKOV, V.S., inzh.

Economy of various methods of weld joint quality control in the continuous production of pipe. Svar. proizv. no.7:22-24 Jl '63. (MIRA 17:2)

1. Institut novoy metallurgicheskoy tekhnologii imeni I.P. Bardina.

VORONOV, Viktor Aleksandrovich; TOKMAKOV, Vasiliy Vasil'yevich; LEVCHENKO, Ya.V., inzh., red.; PANIVAN, P.S., red. izd-va; BELOGUROVA, I.A., tekhn. red.

[Installing poured floor coverings of synthetic materials; experience of the "LOS-2" Trust of the Main Administration for Housing and Public Construction in the City of Leningrad] Ustroistvo nalivnykh pokrytii polov iz sinteticheskikh materialov; opyt tresta "LOS-2" Glavleningradstroia. Leningrad, 1962. 17 p. (Leningradskii dom nauchno-tekhnicheskoi propagandy. Obmen peredovym opytom. Seriia: Stroitel'naia promyshlennost', no.17) (MIRA 15:11)

(Floor coverings)

Tokmakov, Yu.

AID P - 4928

Subject : USSR/Electronics

Card 1/1 Pub. 89 - 12/17

Author : Tokmakov, Yu.

Title : Television receiver of the "KVN-49-4" type with the kinescope 31LK2B.

Periodical : Radio, 7, 44-48, Jl 1956

Abstract : The author describes the adjustments of the 31LK2B kinescope for use with the television receiver of the "KVN-49-4" type. One connection diagram.

Institution : None

Submitted : No date

TOKMAKOV, Yu.

"KVN-49-4" television receiver employing the 31LK2B kinescope. (MIRA 9:9)
Radio no.7:44-48 Jl '56.
(Television--Receivers and reception)

KONONKOV, P.F., kand. biol. nauk; TOKMAKOV, Yu.G.

Effect of additional pollination with foreign pollen on the setting of seeds in self-pollinated carrots in the Moscow area. Agrobiologiia no.2:247-249 Mr-Ap '65. (MIRA 18:11)

1. Gribovskaya ovoshchnaya selektsionnaya opytnaya stantsiya.

TOKMAKOVA, G. S.

Cigar Manufacture and Trade

Variation in the weight of cigars. Tabak 13 No. 3, 1952

Monthly List of Russian Accessions, Library of Congress, September 1952. UNCLASSIFIED.

ТОКМАКОВА, И.

TOKMAKOVA, I, kand.tekhn.nauk.

Stucco mixes with potash added. Stroitel' no.9:14 S '57.
(MIRA 10:12)

(Stucco)

TOKMAKOVA, I. A. Cand. Tech. Sci.

Dissertation: "Investigation of the Problem of Winter Construction of City Roads and Foundations."

15 Nov. 49

Academy of Communal Economy

imeni K. D. Pamfilov

SO Vecheryaya Moskva
Sum 71

TOKMAKOVA, I.A.; KUPRIYANOV, Ye.M., kandidat tekhnicheskikh nauk; NESOV, V.D., inzhener, nauchnyy redaktor; NIKOLAYEV, L.A., redaktor; VORONIN, K.P., tekhnicheskiy redaktor

[Manual for foremen employed in road construction for industrial plants] Spravochnoe posobie dlia mastera po stroitel'stvu promyshlennykh bezrel'sovykh dorog. Pod red. E.M.Kupriianova. Moskva, Gos. izd-vo lit-ry po stroit. i arkhitekture, 1953. 166 p. (MLRA 7:10) [Microfilm]

(Road construction)

TOKMAKOVA, I.A.

Technology of sealing joints of panel buildings, under winter conditions, by concrete with a potash additive. Anal. prich. avar. i povr. stroi. kon. no.2:263-289 '64. (MIRA 18:5)

POLYAKOV, Svyatoslav Vasil'yevich, kand.tekhn.nauk; TOKMAKOVA, I.A., kand.tekhn.nauk, retsenzent; NESOV, V.D., inzh., nauchnyy red.; YEGOROVA, M.O., red.izd-va; TEMKINA, Ye.L., tekhn.red.

[Bonding in brick masonry] Stseplenie v kirpichnoi kladke. Moskva, Gos.izd-vo lit-ry po stroit., arkhit. i stroit. materialam, 1959. 82 p. (MIRA 12:6)
(Bricklaying)

TOKMAKOVA, I.A., kand. tekhn. nauk, red.; STRASHNYKH, V.P., red. izd-va; KASIMOV, D.Ya., tekhn. red.

[Temporary instructions for insuring the solidity of outside walls in buildings using large concrete blocks] Vremennye ukazaniia po obespecheniiu monolitnosti stenovykh ograzhdenii v zdaniiakh iz krupnykh betonnykh blokov VU 5-61. Moskva, Gos. izd-vo lit-ry po stroit., arkhit.i stroit. materialam, 1961. 89 p. (MIRA 15:3)

1. Akademiya stroitel'stva i arkhitektury SSSR. Institut organizatsii, mekhanizatsii i tekhnicheskoy pomoshchi stroitel'stvu.

(Walls) (Concrete construction)

TOLSTYKH, L.N.; Prinimala uchastiye TOKMAKOVA, I.A., kand. tekhn. nauk

Quality of the sealing of joints of exterior walls of apartment buildings constructed of large panel elements. Sbor; nauch. rab. AKKH no.16:3-14 '62. (MIRA 17:8)

TOKMAKOVA, I.A., kandidat tekhnicheskikh nauk; SHISHKIN, A.A., kandidat tekhnicheskikh nauk; BOGATYREV, I.I., kandidat tekhnicheskikh nauk.

Wintertime laying of cement mortars with added potash. Stroi.prom. 32 no.10:17-21 O '54. (MLRA 7:11)
(Mortar) (Potash)

TOKMAKOVA, Irina Alekseyevna, kand. tekhn. nauk; KLENDO, M.A., inzh., nauchnyy red.; YUDINA, L.A., red.izd-va; MIKHEYEVA, A.A., tekhn. red.

[Using mortars and concretes with addition of potash in winter construction work] Primenenie rastvorov i betonov s dobavkoi potasha pri proizvodstve stroitel'nykh rabot v zimnee vremia. Moskva, Gosstroiizdat, 1963. 79 p. (MIRA 16:7)

(Potash) (Concrete) (Mortar)

SAMOSHIN, Ivan Georgiyevich; TOKMAKOVA, Lyudmila Yevgen'yevna; ROSTOVTSEV, Gennadiy Nikolayevich, nauchnyy red.; IVANOVA, K.N., red.; BASHKOVICH, A.L., red.; SUSHKEVICH, V.I., tekhn.red.

[Handbook for young heat treaters] Spravochnik molodogo termista. Moskva, Vses.uchebno-pedagog.izd-vo Trudrezervizdat, 1958. 344 p. (MIRA 12:7)
(Metals--Heat treatment)

TOKMAKOVA, L. YE.

Tokmakova, L. Ye. -- "Technology of the Accelerated Gas Cementation of Parts of Machines." Min Higher Education USSR, Moscow Order of Labor Red Banner Higher Technical School imeni Bauman, Chair of the Technology of Metals, Moscow, 1955 (Dissertation for the Degree of Candidate in Technical Sciences)

SO: Knizhnaya Letopis', No. 23, Moscow, Jun 55, pp 87-104

ТОКМАКОВА, М.М.

USSR/Chemical Technology - Chemical Products and Their Application. Food Industry. I-13

Abs Jour : Ref Zhur - Khimiya, No 1, 1958, 2918

Author : Tokmakova, M.M.
Inst :
Title : Moisture Content Determination in Grain of Elevated Moisture Content.

Orig Pub : Spirt. prom-st', 1957, No 5, 37

Abstract : Description of comparative determinations of the moisture content of rye, millet and oats, according to the GOST and with a hygrometer, using pre-dried grain, which showed a good argreement of the results so obtained. 20 g of grain are pre-dried at 50° (for 30 minutes with a moisture content of 22-23%, and for 60 minutes if the moisture content is higher), after which the grain is cooled and the moisture content is determined in a sample (5g) with a hygrometer.

Card 1/1

TOKMAKOVA, M.M.

Processing of sugar beets and low grade wheat. Spirt. prom. 25 no.6:38-39 '59. (MIRA 12:12)
(Mamadysh--Alcohol) (Sugar beets) (Wheat)

TOKMAKOVA, M.M.

Technological process for preparing yeast without malt nutrition.
Spirt. prom. 24 no.5:23-25 '58. (MIRA 11:9)
(Yeast)

TOKMAKOVA, M.M.

Determining moisture in grains with high moisture content. Spirt. prom. 23 no.5:37 '57. (MLRA 10:8)

1. Mamadyshskiy spirtovoy zavod.
(Grain) (Moisture)

OVCHAROVA, T.P.; TOKMAKOVA, V.N.

Preserving property of the preparation K-25. Kons.i ov.prom. 14 no.2: 9-11 F '59. (MIRA 12:3)

1. TSentral'nyy nauchno-issledovatel'skiy institut konservnoy i ovoshchesushil'noy promyshlennosti.
(Food preservatives)

TOKMAKOVA, V.N.

Determining the rate of decomposition of the beta-phenylethyl esters of bromoacetic acid with the paper chromatography method. Trudy VNIIKOP no.11:40-53 '62. (MIRA 17:9)

TOKMAKOVA, Ye.V., TURKIN, A.D.

Determination of thorium X and of radiothorium in biological media on the basis of thoron. [with summary in English]. Med.rad. 3 no.3 61-65 My-Je '58 (MIRA 11:7)

(THORIUM, determination
thorium X & radiothorium in biol media, thoron method (Rus))

TOKMALAYEV, S.F., dotsent [deceased]; KUZHELEV, N.S., dotsent; OSTROVITYANOV, K.V., akademik; ALEKSEYEV, A.M., dotsent; KUDROV, V.M.; LEONT'YEV, L.A. Prinimali uchastiye: BELYAYEVA, Z.N., kand.ekon. nauk; MRACHKOVSKAYA, I.M., kand.ekonom.nauk; RYNDINA, M.N., kand.ekonom.nauk; SHIRINSKIY, I.D., kand.ekonom.nauk; red.; YUMASHEV, A.I., kand.ekonom.nauk; PROKOP'YEV, S.P., red.; NAUMOV, K.M., tekhn.red.

[Capitalist production method] Kapitalisticheskii sposob proizvodstva. Moskva. Pt.2. 1960. 357 p. (MIRA 13:10)

1. Kommunisticheskaya partiya Sovetskogo Soyuza. Vysshaya partiynaya shkola. 2. Chlen-korrespondent Akademii nauk SSSR (for Leont'yev).

(Economics)

TOKMALAYEVA, S. S.

Tokmalayeva, S. S. --"Analytic Theory of Motion of the VII Satellite of Jupiter." Cand Phys-Math Sci, Main Astronomical Observatory, Acad Sci USSR. Leningrad 1953. (Referativnyy Zhurnal--Astronomiya, Jan 54)

SO: SUM 168, 22 July 1954

APPROVED FOR RELEASE: 07/16/2001 CIA-RDP86-00513R001756020018-1"

KMALAYEVA, S.S.

16(0) P. 2 PHASE I BOOK EXPLOITATION SOV/3342

Akademiya nauk SSSR. Vychislitel'nyy tsentr

Vychislitel'naya matematika (Computer Mathematics) Moscow, Izd-vo AN SSSR, 1959. 148 p. (Series: Its: Sbornik, 5) Errata slip inserted. 3,200 copies printed.

Resp. Ed.: V. A. Ditkin, Professor; Ed.: M. V. Yakovkin; Tech. Ed.: S. G. Markovich.

PURPOSE: This book is intended for applied mathematicians, scientific workers, engineers and scientists whose work involves computation.

COVERAGE: This book contains 9 articles on problems in computer mathematics. Three articles are devoted to problems of nomography. There are individual articles on the numerical integration of first order ordinary differential equations, the approximate integration of multiple integrals, random values with arbitrary distribution, stochastic processes and the Monte Carlo method,

Card 1/7

and the finding of the original function when its transform is a proper rational fraction. References accompany each article.

TABLE OF CONTENTS:

Computer Mathematics SOV/3342

Murav'yev, P. A. On the Problem of Finding the Original Function When the Transform Is a Proper Rational Fraction 140

AVAILABLE: Library of Congress

Card 7/7

AC/mmh
4-26-60

TOKMALAYEVA, S.S.

Ordinate formulas of numerical integration of ordinary differential equations of the first order. Vych. mat. no.5:3-57 '59.
(MIRA 13:3)
(Differential equations)

ACCESSION NR: AT3006847 S/2560/63/000/016/0198/0210

AUTHOR: Tokmalayeva, S. S.

TITLE: On computing flights into a field with one attracting center

SOURCE: AN SSSR. Iskusst. sputniki Zemli, no. 16, 1963, 198-210

TOPIC TAGS: orbital element, trajectory computation, Mars flight, interplanetary travel, space trajectory, rocket orbit

ABSTRACT: A series of formulas suitable for computer programming have been developed and experimentally tested for computing the elements of the trajectory of motion of a material point passing through two fixed points in space under the condition of a fixed time of motion. It is assumed that the motion occurs under the attracting force of a point mass (i.e., the Sun) and that the mass of the moving point is insignificantly small in comparison with the mass of the attracting center. To illustrate the computational method two possible cases of a flight from the orbit of the Earth to the orbit of Mars are considered. Consistent with the theory, the gravitational force of the Earth, Mars, and the other planets are not considered; only the gravitational force of the Sun is

Card 1/2

L 15179-63

ACCESSION NR: AT3006847

3

taken into account. In the first case, Brumberg's data are used; i.e., departure from the center of the Earth at the moment t_0 = September 28.0, 1960 and arrival at the center of Mars at the moment t_1 = April 30.0, 1961. In the second case the date of departure is the same but the date of arrival is chosen so that the angle of flight is $2f > \pi$ and the flight approximates Hohmann's data. Here π is the arc of flight and $2f$ is the angle representing the difference of the true anomalies of the terminal and initial points of flight. The motion is direct in both cases. The BESM-2 computer was used for all computations. The results, as taken from the computer, are given in tabular form. "The author thanks N. N. Strelkov, L. V. Korneychuk, and N. N. Moiseyev for their assistance in programming." Orig. art. has: 2 figures and 23 formulas.

ASSOCIATION: none

SUBMITTED: 20Jan62 DATE ACQ: 08Aug63 ENCL: 00

SUB CODE: AS NO REF SOV: 004 OTHER: 001

Card 2/2

BOBROVSKIY, N.A., prof.; TOKMAN, A.S., starshiy nauchnyy sotrudnik

In memory of Professor Miron Grigor'evich Dodin. Vest. oto-rin. 25 no.2:123-124 Mr-Ap '63. (MIRA 17:1)

TOKMAN, A.S., kand. med. nauk

How to get rid of snoring. Nauka i zhizn' 30 no.5:95 My '63.
(MIRA 16:10)

TOKMAN, A.S.; EL', F.A.

Carrying out measures for lowering the incidence of anginas in industry. Trudy gos. nauch.-issl. inst. ukha, gorla i nosa no.11:172-178 '50. (MIRA 15:6)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut ukha, gorla i nosa.
(TONSILS--DISEASES) (INDUSTRIAL HYGIENE)

TOKMAN, A.S., kand.med.nauk, starshiy nauchnyy sotrudnik

[Methodological instructions on exercise for the prevention and treatment of vestibular disorders] Metodicheskoe pis'mo o gimnastike dlia profilaktiki i lecheniia vestibuliarnykh narushenii. Moskva, 1959. 6 p. (MIRA 14:2)

1. Moscow. Gosudarstvennyy nauchno-issledovatel'skiy institut ukha, gorla i nosa. 2. Gosudarstvennyy nauchno-issledovatel'skiy institut ukha, gorla i nosa (g.Moskva) (for Tokman).
(EXERCISE THERAPY) (VESTIBULAR APPARATUS--DISEASES)

TRUTNEV, V.K., prof., zasluzhennyy deyatel' nauki; TOKMAN, A.S., kand.med. nauk (Moskva)

Prospective plan for the extension of otorhinolaryngological services in the U.S.S.R. for 1959-1965. Vest.otorin. 21 no.3:35-39 My-Je '59. (MIRA 12:9)
(OTOLARYNGOLOGY
in Russia, future trends (Rus))

BOBROVSKIY, N.A., prof. (Moskva); TOKMAN, A.S., kand.med.nauk (Moskva)

Prospects and means of the development of otorhinolaryngological care for the population of the RSFSR. Med. sestra 22 no.8:7-10 Ag'63. (MIRA 16:10)
(OTORHINOLARYNGOLOGY)

TOKMAN, A. S., Doc Med Sci (diss) -- "The rate of infection with diseases of the ear, throat, and nose and problems of organizing otorhinolaryngological aid to the population of the RSFSR". Gor'kiy, 1959. 20 pp (Min Health RSFSR, Gor'kiy Med Inst im S. M. Kirov), 200 copies (KL, No 22, 1959, 120)

TOKMAN, A.S.

THUTHEV, V.K., prof.; TOKMAN, A.S., kand.med.nauk

Otolaryngological services offered inhabitants of the R.S.F.S.R. and ways in which it can be expanded. Zdrav.Ros.Feder. 2 no.3:21-26 Mr '58. (MIRA 11:3)

(OTOLARYNGOLOGY)

TOKMAN, A.S.

SAKHAROV, P.P.; TOKMAN, A.S.; VELIKORUSSOVA, N.V.

First All-Russian Conference of Otorhinolaryngologists. Vest.oto-rin. 18 no.6:82-87 N-D '56. (MLRA 10:2)
(OTORHINOLARYNGOLOGY)

TOKMAN, A.S.

[Incidence of ear, throat and nose diseases, and the task of organizing otorhinolaryngological aid for the population] Zabolevaemost' bolezniami ukha, gorla i nosa i zadachi organizatsii otorinolaringologicheskoi pomoshchi naseleniiu. Moskva, 1957. 174 p.
(OTORHINOLARYNGOLOGY) (MLRA 10:7)